



Intel® E7501 High Performance Appliance Platform

using Low Voltage Intel® Xeon™ Processor or Intel® Xeon™ Processor with 512 KB L2 Cache

Product Overview

The Intel® E7501 High Performance Appliance Platform contains the essential components for delivering the right performance and functionality to meet the most demanding needs of today's communications applications. With dual Intel® Xeon™ processors paired with the Intel® E7501 chipset, support for up to 4 GB of system memory, three 10/100 Ethernet ports and three Gigabit Ethernet ports, this platform is ready to handle the most bandwidth-intensive enterprise connectivity requirements.

Intel's new high performance platform architecture delivers superior performance for the communications appliance market segment. This market segment includes firewall, virtual private network, voice over IP, Web caching, load balancing, gateways, network attached storage and e-Commerce devices that help deliver a new level of services to the network.

The Intel E7501 High Performance Appliance Platform also enables TEMs focused on the communications appliance market segment to reduce their time-to-market. The reference design is easily modified to fit specific needs without reworking the core microprocessor and chipset design. The performance, scalability, and reliability of Intel® Architecture provides an ideal platform for new designs targeting this fast-emerging market segment.

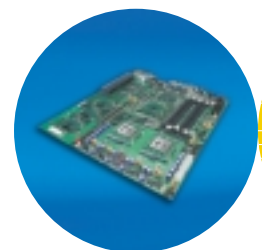
The reference design contains the following information from Intel:

- User's manual
- Orcad V1.0 schematics
- PDF schematics
- Materials list
- Available original design manufacturer list

Product Highlights

- High performance using dual Intel Xeon processors with 512 KB L2 cache. For more power-sensitive systems, this platform is also available with the Low Voltage Intel® Xeon™ processor. The Intel Xeon processor brings Intel® NetBurst™ microarchitecture and Hyper-Threading Technology to deliver best-in-class performance
- Designed with next-generation chipset technology, Intel E7501 chipset design delivers maximized system bus, memory and I/O bandwidth to enhance performance and scalability
 - 533 MHz processor front-side bus
 - Support for DDR RAM (PC2100 registered)
 - ECC for enhanced data integrity
- 256 MB PC2100 DDR RAM upgradable to 4 GB
- Support for up to four IDE hard disk drives
- Flexible networking and I/O capabilities
 - Full-length 64-bit 133 MHz PCI-X slot
 - PCI Mezzanine Card (PMC) standard connector
 - Three 10/100BASE-T Ethernet ports utilizing the 82559 LAN controller
 - Three Gigabit Ethernet ports, one copper and two optical, for fast enterprise connectivity
 - Two USB ports
 - One serial port (RS-232)
- Small form factor designed for 1U/2U-sized devices

Intel in
Communications



Benefits for Developers

The Intel E7501 High Performance Appliance Platform has significant advantages for developers:

Time-To-Market

- This comprehensive platform solution can dramatically accelerate time-to-market. Intel works with independent hardware and software vendors to quickly enable the implementation of designs.

Economical

- Schematics are available for download at no cost from Intel's Developer Site at: developer.intel.com/platforms/applied/eiacomm/reference_configs.htm
- Intel's high performance platform delivers excellent price/performance solution.

Extended Product Lifecycle

- Embedded Intel® processors and other components are designed to meet the extended lifecycle requirements of communications applications.

Scalable and Flexible

- Intel's scalable platform allows you to use the same motherboard but populate it with the right Intel processor for your specific performance needs.
- The scalability of Intel Architecture enables developers to differentiate their products with value-added features and functionality while maintaining the level of performance that end users expect.

Quality

- Intel's manufacturing capacity and quality requirements help ensure product reliability and customer satisfaction.

Broadest Application Support

- The platform is based on the open Intel Architecture that is familiar to most programmers. Moreover, the architecture supports multiple operating systems, including Linux*.

For more information, visit the Intel Web site at: developer.intel.com

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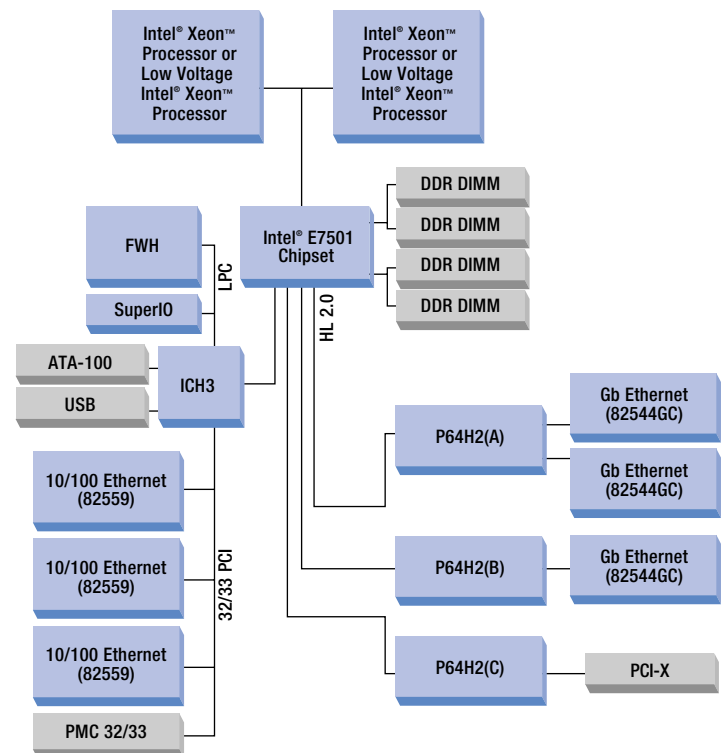
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Third-Party Vendor Support

Intel works with multiple independent hardware and software vendors to enable the efficient implementation of designs based on the Intel E7501 High Performance Appliance Platform.

- Independent Hardware Vendors - Portwell*
- Independent Software Vendors - WireX*

Intel® E7501 High Performance Appliance Platform



Block Diagram

For more information, visit the Intel Web site at:

developer.intel.com/platforms/applied/eiacomm/reference_configs.htm